



Environmental Engineers, Scientists & Consultants

2211 W. Meadowview Road, Suite 101  
Greensboro, NC 27407  
tel: 336/ 323-0092  
fax: 336/ 323-0093  
[www.JoyceEngineering.com](http://www.JoyceEngineering.com)

March 19, 2013

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Ms. Jackie Drummond  
North Carolina Department of Environment and Natural Resources  
Division of Waste Management, Solid Waste Section  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

**RE: Landfill Gas Monitoring Report  
LFG Monitoring - March Event of 2013  
Town of Kernersville Closed Landfill, Permit No. 34-04  
JOYCE Project No. 838.1201.12, Task No. 03**

Dear Ms. Drummond:

Please find attached a Landfill Gas Monitoring Log and an EMRF for a monitoring event that occurred on March 19, 2013 at the Closed Town of Kernersville Landfill (Permit number 34-04). Methane monitoring for this event was conducted as proposed by JOYCE on behalf of the Town of Kernersville in accordance with approved *Landfill Gas Monitoring Plan*—dated July 17, 2012. Methane was detected in gas monitoring probes GW-1, GW-2R, GW-3 and GW-8 above the LEL during this monitoring event. If you have any further questions, please contact me at (336) 323-0092. Thank you.

Sincerely,  
**JOYCE ENGINEERING**

A handwritten signature in cursive script that reads "Adam Cox".

Adam Cox  
Field Consultant

Copy: Thad Buck, Town of Kernersville

DENR USE ONLY

☐ Paper Report☐ Electronic Data - Email CD (data loaded: Yes / No )

Doc/Event #:

NC DENR

Division of Waste Management - Solid Waste

**Environmental Monitoring  
Reporting Form**

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

**Instructions:**

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

**Solid Waste Monitoring Data Submittal Information**

Name of entity submitting data (laboratory, consultant, facility owner):

Joyce Engineering

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: G. Van Ness Burbach, Ph.D., P.G.

Phone: (336)-323-0092

E-mail: vburbach@joyceengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Town of Kernersville Landfill	Freeman Road Kernersville, NC 27284	34-04	.0500	March 19, 2013

**Environmental Status: (Check all that apply)**☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action**Type of data submitted: (Check all that apply)**

<input type="checkbox"/>	Groundwater monitoring data from monitoring wells	<input checked="" type="checkbox"/>	Methane gas monitoring data
<input type="checkbox"/>	Groundwater monitoring data from private water supply wells	<input type="checkbox"/>	Corrective action data (specify) _____
<input type="checkbox"/>	Leachate monitoring data	<input type="checkbox"/>	Other(specify) _____
<input type="checkbox"/>	Surface water monitoring data		

**Notification attached?**

- ☐ No. No groundwater or surface water standards were exceeded.
- ☐ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
- ☒ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

**Certification**

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

G. Van Ness Burbach, Ph.D., P.G.

Technical Consultant

(336)-323-0092

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Signature

Date

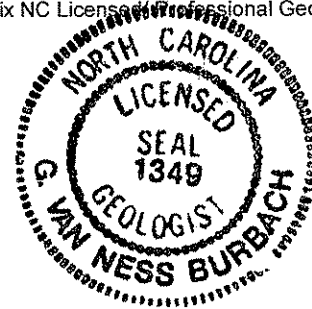
Affix NC License or Professional Geologist Seal

2211 W. Meadowview Rd. Ste. 101, Greensboro, NC 27407

Facility Representative Address

C-0782

NC PE Firm License Number (if applicable effective May 1, 2009)



# Landfill Gas Monitoring Data Form

Facility Name: Town of Kernersville

Permit Number: 34-04

Date of Sampling: March 19, 2013

Personnel: A. Cox

Gas Monitor Type & Serial Number: GEM 2000; GM05194

Calibration Date: March 14, 2013

Field Calibration Date & Time: 3/19/2013 11:10

Calibration Gas Type: 50% CH<sub>4</sub>, exp. 5-2013

General Weather Conditions: Sunny, 50°F

Barometer : 30.25 In-Hg

Location or ID	Time	Probe Pressure (In-Wg)	Instr. sample tube purged	Time Pumped (sec.)	Initial %LEL	Stabilized %LEL	CH <sub>4</sub> (%Vol)	Notes
GW-1	1115	0.030	Y	30	770	770	38.5	replacement probe for GW-2
GW-2R	1118	0.220	Y	30	1242	1242	62.1	
GW-3	1147	0.070	Y	30	228	228	11.4	
GW-4	1141	0.000	Y	30	0	0	0	
GW-5	1134	0.080	Y	30	0	0	0	
GW-6	1112	0.010	Y	30	0	0	0	
GW-7	1122	0.050	Y	30	0	0	0	
GW-8	1157	0.140	Y	30	1116	1116	55.8	